

Serial No.: 10/659,464

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Reply to Office action of September 7, 2005.

REMARKS

Applicant respectfully requests entry of this Amendment and reconsideration of the pending claims. Claims 24-34 and 39-60 are withdrawn. Claim 37 is cancelled, and the subject matter included into amended claim 35. Claim 38 is amended to change dependency. Accordingly, claims 1-23 and 35, 36 and 38 are pending in the application.

Claims 1-23 and 35-38 were rejected under 35 USC § 103(a) as being unpatentable over either of Chandross et al or Suzuki et al in view of Mikami et al. The Office Action confirms that both of Chandross et al and Suzuki et al lack steps defined in the pending claims. Particularly, Chandross et al and Suzuki et al are "lacking essentially the aspect of fixing optical elements relative to the photodefinable copolymer and sending light through at least one of the elements and the photodefinable material." The Office Action attempts to cure this deficiency with the addition of Mikami et al.

With regard to the rejection under 35 USC § 103, to present a *prima facie* case of obviousness, all of the elements must be disclosed or suggested by the reference, or in the combination of references if more than one is present, motivation to combine the references to form the claimed invention must be present, and there must be a reasonable expectation of success by one of ordinary skill in the art that the combination would result in the claimed invention.

Independent claim 1 recites a "photodefinable copolymer material comprising methyl methacrylate, tetrafluoropropyl methacrylate, and an epoxy monomer". Applicant notes that although Chandross et al and Suzuki et al are relied on to disclose the photodefinable material, neither reference discloses, teaches or suggests the claimed tetrafluoropropyl methacrylate. Chandross et al is entirely silent on halogenated acrylates. Suzuki et al lists several, but does not disclose, teach or suggest the claimed material. In addition to the deficiencies of the primary references noted in the Office Action, the primary references fail further to disclose, teach or suggest a claim element.

The addition of Mikami et al does not cure any of the deficiencies of the primary reference, as Mikami et al does not disclose the invention defined in claim 1. Particularly, Mikami et al is not relied on to disclose tetrafluoropropyl methacrylate, and does not, in fact, disclose the same. As none of the cited references, alone or in

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combination, disclose all of the elements of claim 1, the Office Action has not made a *prima facie* case of obviousness. Applicant submits that at least claim 1 is allowable over the cited references, and notice to that effect is respectfully requested.

Claims 2-18 depend from claim 1 and are allowable for at least the reasons that claim 1 is allowable. Notice to that effect is respectfully requested.

Independent claim 19 defines "at least one of the optical elements comprising a splitter". Suzuki et al discloses "optical elements such as plastic microlenses and arrays thereof, optical waveguides, diffraction gratings, and holograms" (see abstract) but does not disclose the use of a splitter as defined by claim 19. Chandross et al discloses a stationary ion beam, and teaches that "it appears desirable to focus the beam as sharply as possible..." and "the greater the intensity of the incident light, the greater the number of monomer molecules that become locked in the polymer..." (last paragraph column 4). Of note is the Mikami et al does not disclose a splitter either.

Accordingly, because none of the cited references disclose a splitter, a *prima facie* case of obviousness has not been made with regard to at least that element. As for Chandross et al, splitting the light would inherently reduce the intensity. Reducing the intensity would be counter to the teaching of Chandross et al. As for Suzuki et al, optical elements may have been called out, but clearly a splitter was not mentioned or, by implication, contemplated. It would be in error to imply an optical element such as the optical element as defined in claim 19. As none of the cited references, alone or in combination, disclose all of the elements of claim 19, the Office Action has not made a *prima facie* case of obviousness. Applicant submits that at least claim 19 is allowable over the cited references, and notice to that effect is respectfully requested.

Claims 20-23 depend from claim 19 and are allowable for at least the reasons that claim 19 is allowable. Notice to that effect is respectfully requested.

Claim 35 is amended to include the subject matter of cancelled claim 37. Amended claim 35 recites a "photodefinable copolymer material [that] comprises methyl methacrylate, tetrafluoropropyl methacrylate, and an epoxy monomer". For at least the same reasons as claim 1 is allowable, Applicant submits that amended claim 35 is allowable.

Claims 36 and 38 depend from claim 35 and are allowable for at least the reasons that claim 35 is allowable. Notice to that effect is respectfully requested.

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Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is invited to contact the Applicant's undersigned representative at the telephone number below. Any additional fees for the accompanying response are hereby petitioned for, and the Director is authorized to charge such fees as may be required to Deposit Account 07-0868.

Respectfully submitted,



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